

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor:	Kelly J. Reasoner	Examiner: Michael E. Butler
Serial No.:	10/665,132	Group Art Unit: 3653
Filed:	September 16, 2003	Docket No.: 100201882-1
Title:	Inventory Control Device	

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**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is filed in response to the Final Office Action mailed May 5, 2008 and Notice of Appeal filed on August 4, 2008.

**AUTHORIZATION TO DEBIT ACCOUNT**

It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's deposit account no. 08-2025.

### **I. REAL PARTY IN INTEREST**

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

## **II. RELATED APPEALS AND INTERFERENCES**

There are no known related appeals, judicial proceedings, or interferences known to appellant, the appellant's legal representative, or assignee that will directly affect or be directly affected by or have a bearing on the Appeal Board's decision in the pending appeal.

### **III. STATUS OF CLAIMS**

Claims 1-3, 5-7, 9-11, and 14-16 are pending in the application. Claims 14-16 are withdrawn, and claims 4, 8, and 12-13 are canceled. No claims are allowed. The final rejection of claims 1-3, 5-7, and 9-11 is appealed.

Appellants note that the Final Office Action mailed 05/05/2008 incorrectly indicates that claims 1-16 are pending in the application. This indication is incorrect because claims 4, 8, and 12-13 were previously canceled.

Furthermore, Appellants note that the Final Office Action mailed 05/05/2008 was mailed in response to a previous appeal brief. This Final OA cites new art/rejections and is therefore procedurally improper since a non-final office action should have been issued.

#### **IV. STATUS OF AMENDMENTS**

No amendments were made after receipt of the Final Office Action. All amendments have been entered.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The following provides a concise explanation of the subject matter defined in each of the claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R.

§ 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element or that these are the sole sources in the specification supporting the claim features.

### **Claim 1**

An inventory control device comprising (FIGS. 1-3 show an exemplary data storage system 100; paragraph [0011]):

a latch positioned in relation to an access device of a data storage system so that opening the access device causes the latch to move from a first position to a second position (as illustrated in FIGS. 3A-3C, opening the access device 120 causes the latch 304 to move from a first position, FIG. 3A, to second position, FIGS. 3B, 3C; paragraph [0016]);

a sensor to sense a latch state indicating the position of the latch (Figs. 3A-3C show a sensor 306, such as an optical interrupter, that senses a state indicating a position or movement of the latch; paragraph [0016]);

control logic communicatively coupled to the sensor, to cause the data storage system to inventory one or more storage locations associated with the access device if the sensor indicates the latch is in the second position and the access device is closed, and to cause the data storage system to not inventory the one or more storage locations if the sensor indicates the latch is in the first position and the access device is closed (control logic 220 obtains position of the latch and uses this information to determine whether to take an inventory of cartridges; paragraphs [0019] – [0021]); and

an actuator operatively associated with said latch and said control logic, said actuator being operable to move said latch from the second position to the first position, said control logic operating said actuator to move said latch from

the second position to the first position (the control logic causes the actuator 302 or other mechanism to return the latch back to the position indicating the device was not opened; paragraph [0020]).

#### Claim 7

A method comprising:

obtaining a position of a latch, the latch being moveable between a first position and a second position, the first position of the latch indicating if an access device of a data storage system was not opened while the data storage system was shut down, the second position of the latch indicating if the access device of the data storage system was opened while the data storage system was shut down (FIG. 4, 405: after the system is started or restarted, the control logic 220 obtains the position of the latch 304; paragraph [0019]);

causing the data storage system to perform an inventory on one or more storage locations associated with the access device if the latch is in the second position (FIG. 4, 415: control logic 220 causes an inventory to be performed when the latch state indicates the access device 120 was opened; paragraphs [0019] and [0020]);

causing the data storage system to not perform the inventory on the one or more storage locations if the latch is in the second position (FIG. 4, 410: if the access device was not opened, it is not necessary to inventory the storage locations; paragraph [0021]; and

operating an actuator to cause the actuator to move the latch from the second position to the first position (the control logic causes the actuator 302 or other mechanism to return the latch back to the position indicating the device was not opened; paragraph [0020]).

#### Claim 11

An inventory control device comprising (FIGS. 1-3 show an exemplary data storage system 100; paragraph [0011]):

latch means (#304) positioned in relation to an access device means of a data storage system means so that opening the access device causes the latch means to move

from a first position to a second position (as illustrated in FIGS. 3A-3C, opening the access device 120 causes the latch 304 to move from a first position, FIG. 3A, to second position, FIGS. 3B, 3C; paragraph [0016]);

sensing means (#306) to sense a latch state indicating the position of the latch (Figs. 3A-3C show a sensor 306, such as an optical interrupter, that senses a state indicating a position or movement of the latch; paragraph [0016]);

logic means (#220) communicatively coupled to sensing means, to cause the data storage system means to inventory one or more storage locations associated with the access device means if the latch state indicates the latch means is in the second position and the access device is closed, and to cause the data storage system to not inventory the one or more storage locations if said sensing means indicates said latch means is in the first position and the access device is closed (control logic 220 obtains position of the latch and uses this information to determine whether to take an inventory of cartridges; paragraphs [0019] – [0021]); and

actuator means (#302) operatively associated with said latch means and responsive to said logic means, said actuator means moving said latch means from the second position to the first position, said logic means controlling said actuator means to move said latch means from the second position to the first position (the control logic causes the actuator 302 or other mechanism to return the latch back to the position indicating the device was not opened; paragraph [0020]).



## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1, 7, 9, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,674,711 (Shiba). (Note: The Final OA mailed 05/05/2008 indicates that claim 13 is also rejected, but this is an error since claim 13 was canceled.)

Claims 1-3 and 7, 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,782,448 (Goodman) in view of US publication number 2002/0138174A1 (Chaloner).

Claims 1, 5-7, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,782,448 (Goodman) in view of US publication number 2004/0118215A1 (Reasoner).

Claims 1-3 and 7, 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,674,711 (Shiba) in view of US publication number 2002/0138174A1 (Chaloner).

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Claims 1, 7, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,782,448 (Goodman) in view of USPN 6,674,711 (Shiba).

Claims 1, 7, and 11 are rejected under the judicially created doctrine of double patenting over claims 6, 9, and 13 of USPN 6,741,907 (Chaloner '907).

Claims 7 and 9-11 are rejected under the judicially created doctrine of double patenting over claims 14, 5, 8-9, and 13-15 of USPN 6,907,314 (Reasoner '314).

## **VII. ARGUMENT**

The rejection of claims 1-3, 5-7, and 9-11 is improper, and Appellants respectfully request reversal of these rejections.

### **Overview of Claims and Primary References (Goodman and Shiba)**

As a precursor to the arguments, Appellants provide an overview of the claims and the primary references (Goodman and Shiba). This overview will assist in determining the scope and content of the prior art as required in *Graham* (see *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 setting out an objective analysis for applying 103 rejections).

Independent claim 1 is directed to an inventory control device that determines whether or not to perform an inventory of data cartridges stored in the inventory control device (for example, a tape storage library). When an access device (for example, a drawer) is opened, a latch moves from a first position to a second position. A sensor detects the position of the latch, i.e., whether the latch is in the first position or the second position. Control logic coupled to the sensor causes an inventory operation to be conducted if the latch is in the second position. By contrast, if the latch remains in the first position, then no inventory is performed since the access device was not opened. The inventory control device also includes an actuator. The actuator moves the latch back from the second position to the first position.

Goodman teaches a storage library that can update firmware without shutting down the storage library and then causing an inventory to occur. When firmware updates are received, they are stored in the storage library. After the firmware is updated, the storage library is reset. An inventory, however, does not occur at this time since Goodman tracks that the reset was due to a firmware update (see Goodman at col. 12, lines 4-23).

Shiba teaches a detector that detects when discs or stockers are loaded into slots of a changer. When a detection is made that stockers are loaded into the slots of the changer, a data table is formed which includes identification numbers of types of stockers

(see Shiba at column 13, lines 8-19). Shiba, here, is not performing an inventory when stockers are loaded, but is reading data from memory and forming a data table.

**Claim Rejections: 35 USC § 102(e)**

Claims 1, 7, 9, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,674,711 (Shiba). These rejections are traversed.

Claims 1, 7, 9, and 11 recite one or more elements not taught or even suggested in Shiba. Claim 1 is selected for discussion.

As one example, claim 1 recites an inventory control device that includes a movable latch, a sensor to sense position of the latch, an actuator to move the latch, and control logic. When the sensor indicates that the latch is in a second position, the control logic causes the data storage system to inventory storage locations. When the sensor indicates that the latch is in a first position, no inventory is performed. Shiba does not teach these claim elements.

Shiba teaches a detector that detects when discs or stockers are loaded into slots of a changer. When a detection is made that stockers are loaded into the slots of the changer, a data table is formed which includes identification numbers of types of stockers (see Shiba at column 13, lines 8-19). Shiba, here, is not performing an inventory when stockers are loaded, but is reading data from memory and forming a data table. In other words, **Shiba never performs an “inventory” as recited in claim 1**. Hence, Shiba does not teach the following claim elements:

control logic communicatively coupled to the sensor, to cause the data storage system to inventory one or more storage locations associated with the access device if the sensor indicates the latch is in the second position and the access device is closed, and to cause the data storage system to not inventory the one or more storage locations if the sensor indicates the latch is in the first position and the access device is closed.

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed (see *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227

U.S.P.Q. 773 (Fed. Cir. 1985)). For at least these reasons, claims 1, 7, 9, and 11 are allowable over Shiba.

**Claim Rejections: 35 USC § 103(a)**

Claims 1-3 and 7, 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,782,448 (Goodman) in view of US publication number 2002/0138174A1 (Chaloner). These rejections are traversed.

Claims 1-3 and 7, 9-11 recite one or more elements that are not taught or suggested in Goodman in view of Chaloner. These missing elements show that the differences between the combined teachings in the art and the recitations in the claims are great. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art. Claim 1 is selected for discussion.

As one example, claim 1 recites a latch that moves from a first position to a second position. In other words, claim 1 recites an object (i.e., a latch) that moves between two positions. The Examiner argues that this element is taught in Goodman at column 12, lines 33-35. Appellants respectfully disagree.

Column 12, lines 33-35 in Goodman teach a door monitoring switch that could "latch" an indicator if a door was opened to indicate that an inventory operation should be conducted. Nowhere does Goodman provide any additional details of a door monitoring switch, an indicator, or how the door monitoring switch could somehow "latch" the indicator. Goodman provides no details about how the switch works. Indeed, because Goodman uses the word "latch" as a verb to describe how the door monitoring switch interacts with the indicator, it cannot be said that Goodman discloses a latch (i.e., as a noun) that moves. Even if it were proper (which it is not) to view Goodman's description as disclosing a latch (as a thing as opposed to an action), Goodman does not disclose a latch that moves from a first position to a second position.

Chaloner fails to cure the deficiencies of Goodman. Thus, the differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, the claims are allowable over the art of record.

As another example, claim 1 recites an actuator that moves the latch from the second position to the first position. The Examiner argues that this element is taught in Goodman at column 11, line 65 to column 12, line 3. Appellants respectfully disagree.

Column 11, line 65 to column 12, line 3 in Goodman teaches a robot accessor (also known in the art as a picker) that moves and reads cartridges in the storage library. The robot accessor or picker grabs cartridges and transfers them to read/write drives. **A robot accessor is not an actuator.** It is not reasonable to equate an actuator that moves a latch with a robot accessor.

According to MPEP § 2111.01, the words of a claim must be given their “plain meaning.” Goodman teaches that the robot accessor is used to grip storage media and transport the media to storage shelves or drives (see Goodman at column 4, lines 37-42). Thus, Goodman uses the term “robot accessor” per the plain meaning of this term.

Appellants acknowledge that claims must be given their broadest interpretation during patent examination. However, this interpretation must be a “**reasonable interpretation consistent with the specification**” (see MPEP 2111: emphasis added). Goodman and Appellants’ specification repeatedly use the terms robot accessor and picker in a manner consistent with the plain meaning of this term. A robot accessor is not an actuator to move a latch, and it is unreasonable to equate a robot accessor as an actuator that moves a latch.

Chaloner fails to cure the deficiencies of Goodman. Specifically, paragraphs [0064] and [0065] in Chaloner teach a lock assembly in which an actuator moves a bolt to lock and unlock the drawer of a data storage library. Chaloner does not teach or even suggest that the bolt is moved when the drawer is opened. In other words, the lock assembly in Chaloner is performing an entirely different function with very different components. The lock assembly in Chaloner is being used to lock and unlock a drawer, not being used to determine when a drawer is opened to perform an inventory.

Thus, the differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, the claims are allowable over the art of record.

As yet another example, claim 1 recites that the actuator moves the latch from one position to another position. The Examiner equates the robot accessor in Goodman with the claimed actuator. The Examiner also equates the door monitoring switch in Goodman with the claimed latch. Thus, the issue is: Does the robot accessor in Goodman move the door monitoring switch? It does not.

The robot accessor in Goodman functions to move cartridges in the library and read bar codes on the cartridges. By contrast, the door monitoring switch in Goodman provides an indication whether a door to the storage library is opened. The robot accessor in Goodman never moves the door monitoring switch.

Chaloner fails to cure the deficiencies of Goodman. As mentioned above, Chaloner teaches a lock assembly in which an actuator moves a bolt to lock and unlock the drawer of a data storage library. Chaloner does not teach or even suggest that the bolt is moved when the drawer is opened. In other words, the lock assembly in Chaloner is performing an entirely different function with very different components. The lock assembly in Chaloner is being used to lock and unlock a drawer, not being used to determine when a drawer is opened to perform an inventory.

Thus, the differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, the claims are allowable over the art of record.

#### **Claim Rejections: 35 USC § 103(a)**

Claims 1, 5-7, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,782,448 (Goodman) in view of US publication number 2004/0118215A1 (Reasoner). These rejections are traversed.

Goodman is not properly combinable with Reasoner. Reasoner has a filing date of December 18, 2002 and a publication date of June 24, 2004. The present application, however, has a filing date of September 16, 2003. While Reasoner has a filing date before the filing date of the present application, the publication date of Reasoner is after the filing date of the present application. As such, Reasoner is classified as a 35 U.S.C. §102(e) reference. In other words, the present application and Reasoner were, at the time

of the invention of the present application, commonly owned by Hewlett-Packard Company. Since **Reasoner only qualifies as prior art under 35 U.S.C. §102(e)**, Appellants submit that under the prior art exclusion of 35 U.S.C. §103(c), Reasoner does not qualify as a 35 U.S.C. §102(e) reference in an obviousness rejection under 35 U.S.C. §103(a) (*see* MPEP §706.02(l)(3); *see also* MPEP §706.07(a)).

Appellants respectfully request that the rejections be withdrawn.

**Claim Rejections: 35 USC § 103(a)**

Claims 1-3 and 7, 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,674,711 (Shiba) in view of US publication number 2002/0138174A1 (Chaloner). These rejections are traversed.

Claims 1-3 and 7, 9-11 recite one or more elements that are not taught or suggested in Shiba in view of Chaloner. These missing elements show that the differences between the combined teachings in the art and the recitations in the claims are great. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art. Claim 1 is selected for discussion.

As one example, claim 1 recites an inventory control device that includes a movable latch, a sensor to sense position of the latch, an actuator to move the latch, and control logic. When the sensor indicates that the latch is in a second position, the control logic causes the data storage system to inventory storage locations. When the sensor indicates that the latch is in a first position, no inventory is performed. Shiba in view of Chaloner does not teach these claim elements.

Shiba teaches a detector that detects when discs or stockers are loaded into slots of a changer. When a detection is made that stockers are loaded into the slots of the changer, a data table is formed which includes identification numbers of types of stockers (see Shiba at column 13, lines 8-19). Shiba, here, is not performing an inventory when stockers are loaded, but is reading data from memory and forming a data table. In other words, **Shiba never performs an “inventory” as recited in claim 1**. Hence, Shiba does not teach the following claim elements:

control logic communicatively coupled to the sensor, to cause the data storage system to inventory one or more storage locations associated with the access device if the sensor indicates the latch is in the second position and the access device is closed, and to cause the data storage system to not inventory the one or more storage locations if the sensor indicates the latch is in the first position and the access device is closed.

Chaloner fails to cure the deficiencies of Shiba. As mentioned above, Chaloner teaches a lock assembly in which an actuator moves a bolt to lock and unlock the drawer of a data storage library. Chaloner does not teach or even suggest that the position of this bolt (i.e., first or second position) causes an inventory to be performed. The lock assembly in Chaloner is being used to lock and unlock a drawer, not perform an inventory.

Thus, the differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, the claims are allowable over the art of record.

#### **Claim Rejections: 35 USC § 103(a)**

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not qualify as a 35 U.S.C. §102(e) reference in an obviousness rejection under 35 U.S.C. §103(a) (*see* MPEP §706.02(l)(3); *see also* MPEP §706.07(a)).

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According to MPEP § 2111.01, the words of a claim must be given their “plain meaning.” Goodman teaches that the robot accessor is used to grip storage media and transport the media to storage shelves or drives (see Goodman at column 4, lines 37-42). Thus, Goodman uses the term “robot accessor” per the plain meaning of this term.

Appellants acknowledge that claims must be given their broadest interpretation during patent examination. However, this interpretation must be a “**reasonable interpretation consistent with the specification**” (see MPEP 2111: emphasis added). Goodman and Appellants’ specification repeatedly use the terms robot accessor and picker in a manner consistent with the plain meaning of this term. A robot accessor is not an actuator to move a latch, and it is unreasonable to equate a robot accessor as an actuator that moves a latch.

As yet another example, claim 1 recites that the actuator moves the latch from one position to another position. The Examiner equates the robot accessor in Goodman with the claimed actuator. The Examiner also equates the door monitoring switch in Goodman with the claimed latch. Thus, the issue is: Does the robot accessor in Goodman move the door monitoring switch? It does not.

The robot accessor in Goodman functions to move cartridges in the library and read bar codes on the cartridges. By contrast, the door monitoring switch in Goodman provides an indication whether a door to the storage library is opened. The robot accessor in Goodman never moves the door monitoring switch.

Shiber fails to cure the deficiencies of Goodman. As one example, claim 1 recites an inventory control device that includes a movable latch, a sensor to sense position of the latch, an actuator to move the latch, and control logic. When the sensor indicates that the latch is in a second position, the control logic causes the data storage system to inventory storage locations. When the sensor indicates that the latch is in a first position, no inventory is performed. Shiba does not teach these claim elements.

Shiba teaches a detector that detects when discs or stockers are loaded into slots of a changer. When a detection is made that stockers are loaded into the slots of the changer, a data table is formed which includes identification numbers of types of stockers (see Shiba at column 13, lines 8-19). Shiba, here, is not performing an inventory when stockers are loaded, but is reading data from memory and forming a data table. In other words, **Shiba never performs an “inventory” as recited in claim 1**. Hence, Shiba does not teach the following claim elements:

control logic communicatively coupled to the sensor, to cause the data storage system to inventory one or more storage locations associated with the access device if the sensor indicates the latch is in the second position and the access device is closed, and to cause the data storage system to not inventory the one or more storage locations if the sensor indicates the latch is in the first position and the access device is closed.

Thus, the differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, the claims are allowable over the art of record.

#### **Claim Rejections: Double Patenting**

Claims 1, 7, and 11 are rejected under the judicially created doctrine of double patenting over claims 6, 9, and 13 of USPN 6,741,907 (Chaloner '907). These rejections are traversed.

On April 13, 2007, Appellants filed a terminal disclaimer rendering this rejection moot. The Examiner has failed to recognize this timely filed terminal disclaimer.

#### **Claim Rejections: Double Patenting**

Claims 7 and 9-11 are rejected under the judicially created doctrine of double patenting over claims 14, 5, 8-9, and 13-15 of USPN 6,907,314 (Reasoner '314). These rejections are traversed.

On April 13, 2007, Appellants filed a terminal disclaimer rendering this rejection moot. The Examiner has failed to recognize this timely filed terminal disclaimer.

### **CONCLUSION**

In view of the above, Appellants respectfully request the Board of Appeals to reverse the Examiner's rejection of all pending claims.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. 832-236-5529. In addition, all correspondence should continue to be directed to the following address:

**Hewlett-Packard Company**  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, Colorado 80527-2400

Respectfully submitted,

/Philip S. Lyren #40,709/

Philip S. Lyren  
Reg. No. 40,709  
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### **VIII. Claims Appendix**

1. An inventory control device comprising:

a latch positioned in relation to an access device of a data storage system so that opening the access device causes the latch to move from a first position to a second position;

a sensor to sense a latch state indicating the position of the latch;

control logic communicatively coupled to the sensor, to cause the data storage system to inventory one or more storage locations associated with the access device if the sensor indicates the latch is in the second position and the access device is closed, and to cause the data storage system to not inventory the one or more storage locations if the sensor indicates the latch is in the first position and the access device is closed; and

an actuator operatively associated with said latch and said control logic, said actuator being operable to move said latch from the second position to the first position, said control logic operating said actuator to move said latch from the second position to the first position.

2. The device of claim 1, wherein the access device comprises a data storage drawer.

3. The device of claim 2, wherein the storage locations comprise data cartridge locations within the data storage drawer.

4. (canceled).

5. The device of claim 1, wherein the actuator comprises a solenoid.

6. The device of claim 1, wherein the sensor comprises an optical interrupter.

7. A method comprising:

obtaining a position of a latch, the latch being moveable between a first position and a second position, the first position of the latch indicating if an access device of a data storage system was not opened while the data storage system was shut down, the second position of the latch indicating if the access device of the data storage system was opened while the data storage system was shut down;

causing the data storage system to perform an inventory on one or more storage locations associated with the access device if the latch is in the second position;

causing the data storage system to not perform the inventory on the one or more storage locations if the latch is in the second position; and

operating an actuator to cause the actuator to move the latch from the second position to the first position.

8. (canceled).

9. The method of claim 7, wherein obtaining the position of the latch comprises obtaining a latch state indicating the position of the latch by means of a sensor.

10. The method of claim 7, wherein the access device comprises a data storage drawer.

11. An inventory control device comprising:

latch means positioned in relation to an access device means of a data storage system means so that opening the access device causes the latch means to move from a first position to a second position;

sensing means to sense a latch state indicating the position of the latch;  
logic means communicatively coupled to sensing means, to cause the data storage system means to inventory one or more storage locations associated with the access device means if the latch state indicates the latch means is in the second position and the access device is closed, and to cause the data storage system to not inventory the one or more storage locations if said sensing means indicates said latch means is in the first position and the access device is closed; and

actuator means operatively associated with said latch means and responsive to said logic means, said actuator means moving said latch means from the second position to the first position, said logic means controlling said actuator means to move said latch means from the second position to the first position.

12. (canceled)

13. (canceled)



14. A data storage system comprising:

an access device; a plurality of data cartridges disposed in the access device;

a mechanical device moveable between first and second positions, the mechanical device positioned in relation to the access device so that opening the access device causes the mechanical device to change position; and

control logic coupled to the mechanical device, to sense movement of the mechanical device and to initiate inventory of the data cartridges if the position of the mechanical device indicates the access device was opened while the data storage system was shut down.

15. The data storage system of claim 14, wherein the mechanical device comprises a latch.

16. The data storage system of claim 14, further comprising a flag positioned in relation to the access device so that at least partially opening the access device causes the flag to contact the mechanical device and move the mechanical device from the first position to the second position.

**IX. EVIDENCE APPENDIX**

None.

**X. RELATED PROCEEDINGS APPENDIX**

None.